

What is Claimed is:

1. A method of reducing or inhibiting a recall immune response, comprising administering an amount of an agent that reduces or inhibits OX40 or OX40L signaling, expression or activity sufficient to reduce or inhibit a recall immune response.
2. The method of claim 1, wherein said immune response is mediated at least in part by OX40 or OX40 ligand (OX40L).
3. The method of claim 1, wherein the recall response is a secondary, tertiary or subsequent immune response to an antigen.
4. The method of claim 1, wherein the recall response occurs in lung, spleen, lymph node or vessel, or skin.
5. The method of claim 1, wherein the agent is administered to a mammalian subject.
6. The method of claim 5, wherein the mammalian subject is a human.
7. The method of claim 5, wherein the mammalian subject has one or more symptoms of asthma.
8. The method of claim 1, wherein the agent comprises a molecule that binds to OX40 or OX40L.
9. The method of claim 8, wherein the molecule comprises an antibody or a modified OX40 or OX40L.
10. The method of claim 9, wherein the modified OX40 or OX40L comprises a subsequence, variant sequence, chimeric sequence or dominant negative sequence.
11. The method of claim 8, wherein the molecule comprises a human or humanized antibody.
12. The method of claim 1, wherein the agent comprises an antisense nucleic acid molecule or RNAi that binds to OX40 or OX40L DNA or RNA.
13. The method of claim 1, wherein the agent comprises a cytokine.
14. The method of claim 13, wherein the cytokine comprises IL-10.
15. A method of alleviating or ameliorating a symptom associated with a secondary or subsequent immune response to an antigen, comprising administering an amount of an agent that reduces or inhibits OX40 or OX40L signaling, expression or activity sufficient to alleviate or ameliorate the symptom.

16. A method of alleviating or ameliorating a symptom associated with a secondary or subsequent immune response to an antigen, wherein said response is mediated at least in part by OX40 signaling, comprising administering an amount of an agent that reduces or inhibits OX40 or OX40L signaling, expression or activity sufficient to alleviate or ameliorate the symptom.
17. The method of claims 15 or 16, wherein the immune response comprises an OX40 mediated T cell response.
18. The method of claim 17, wherein the OX40 mediated T cell response contributes to inflammation.
19. The method of claims 15 or 16, wherein the agent comprises a molecule that binds to OX40 or OX40L.
20. The method of claims 15 or 16, wherein the molecule comprises an antibody or a modified OX40 or OX40L.
21. The method of claim 20, wherein the modified OX40 or OX40L comprises a subsequence, variant sequence, chimeric sequence or dominant negative sequence.
22. The method of claims 15 or 16, wherein the agent comprises an antisense nucleic acid molecule or RNAi that binds to OX40 or OX40L DNA or RNA.
23. The method of claims 15 or 16, wherein the symptom is associated with asthma.
24. The method of claims 15 or 16, wherein the symptom is associated with allergic asthma.
25. The method of claim 24, wherein the symptom associated with allergic asthma comprises wheezing, shortness of breath, chest tightness, cough, and sputum production, airflow restriction, airway edema or mucus production.
26. The method of claim 24, wherein the symptom associated with allergic asthma comprises eosinophil infiltration of lung, leukocyte infiltration of lung, hyperplasia of mucus secreting epithelium, inflammatory lesion of lung, goblet cell hyperplasia, or increased Th2 cytokine production.
27. The method of claim 26, wherein the cytokine comprises an interleukin (IL).
28. The method of claim 27, wherein the interleukin (IL) comprises IL-4, IL-5, IL-9, IL-13 or IL-16.

29. A method of reducing or inhibiting one or more symptoms associated with a secondary or subsequent immune response to an antigen, comprising administering an amount of an agent sufficient to reduce or inhibit OX40 or OX40L signaling, expression or activity, thereby reducing or inhibiting one or more symptoms associated with a secondary or subsequent immune response.
30. The method of claim 29, wherein said response is mediated at least in part by OX40 or OX40 ligand (OX40L).
31. A method of reducing or inhibiting one or more symptoms associated with a secondary or subsequent immune response to an antigen, wherein said response is mediated at least in part by OX40 mediated T cell response, comprising administering an amount of an agent sufficient to reduce or inhibit OX40 mediated T cell response, thereby reducing or inhibiting one or more symptoms associated with a secondary or subsequent immune response.
32. The method of claim 31, wherein the agent is administered to a mammalian subject.
33. The method of claim 32, wherein the mammalian subject is a human.
34. A method of reducing or inhibiting one or more symptoms of asthma, comprising administering to a subject having or suspected of having asthma an amount of an agent sufficient to reduce or inhibit OX40 or OX40L signaling, expression or activity, thereby reducing or inhibiting one or more symptoms of asthma.
35. A method of reducing or inhibiting one or more symptoms of asthma, comprising administering to a subject having or suspected of having asthma an amount of an agent sufficient to reduce or inhibit OX40 mediated T cell response, thereby reducing or inhibiting one or more symptoms of asthma.
36. A method of treating asthma, comprising administering to a subject having asthma an amount of an agent sufficient to reduce or inhibit OX40 or OX40L signaling, expression or activity, thereby treating asthma.
37. A method of treating asthma, comprising administering to a subject having asthma an amount of an agent sufficient to reduce or inhibit OX40 mediated T cell response, thereby treating asthma.
38. The method of any of claims 34 to 37, wherein the agent is administered via inhalation.

39. The method of any of claims 34 to 37, wherein the agent is formulated into an aerosol.
40. A method of identifying an agent that reduces or inhibits a recall immune response, comprising:
- providing a test agent that reduces or inhibits signaling, expression or activity of OX40 or OX40 ligand (OX40L);
 - measuring a recall immune response in the presence of the test agent, wherein a reduction or inhibition of a recall response identifies the test agent as an agent that reduces or inhibits a recall immune response.
41. A method of identifying an agent that reduces or inhibits a recall immune response, comprising:
- providing a test agent that binds to OX40 or OX40 ligand (OX40L);
 - measuring a recall immune response in the presence of the test agent, wherein a reduction or inhibition of a recall response identifies the test agent as an agent that reduces or inhibits a recall immune response.
42. A method of identifying an agent that alleviates or ameliorates a symptom associated with a secondary or subsequent immune response to an antigen, comprising:
- providing a test agent that reduces or inhibits signaling, expression or activity of OX40 or OX40 ligand (OX40L);
 - measuring a symptom associated with a secondary or subsequent immune response to an antigen in the presence of the test agent, wherein a reduction or inhibition of a symptom associated with a secondary or subsequent immune response to an antigen identifies the test agent as an agent that alleviates or ameliorates a symptom associated with a secondary or subsequent immune response to an antigen.
43. A method of identifying an agent that alleviates or ameliorates a symptom associated with a secondary or subsequent immune response to an antigen, comprising:
- providing a test agent that binds to OX40 or OX40 ligand (OX40L);
 - measuring a symptom associated with a secondary or subsequent immune response to an antigen in the presence of the test agent, wherein a reduction or inhibition of a symptom associated with a secondary or subsequent immune response to an antigen identifies the test agent as

an agent that alleviates or ameliorates a symptom associated with a secondary or subsequent immune response to an antigen.

44. The method of claims 40 to 43, wherein the recall immune response is mediated at least in part by OX40 signaling.
45. The method of claim 40 to 43, wherein the test agent comprises an antibody or a modified OX40 or OX40L.
46. The method of claim 45, wherein the modified OX40 or OX40L comprises a subsequence, variant sequence, chimeric sequence or dominant negative sequence.
47. The method of claims 40 to 43, wherein the test agent comprises a human or humanized antibody.
48. The method of claims 40 to 43, wherein the test agent comprises an antisense nucleic acid molecule or RNAi that binds to OX40 or OX40L DNA or RNA.
49. The method of claims 40 to 43, wherein the test agent comprises a cytokine.
50. The method of claims 40 to 43, wherein recall immune response or symptom occurs *in vivo*.
51. The method of claims 40 to 43, wherein recall immune response or symptom occurs in a mammal.
52. The method of claims 42 or 43, wherein the symptom comprises swelling, enlargement, mucus production, rash, eosinophil infiltration, leukocyte or lymphocyte infiltration, cytokine or chemokine production, hyperplasia, inflammatory lesions or necrosis.
53. A method of identifying an agent that alleviates or ameliorates a symptom associated with asthma, comprising:
 - a. providing a test agent that reduces or inhibits signaling, expression or activity of OX40 or OX40 ligand (OX40L);
 - b. measuring a symptom associated with asthma in the presence of the test agent, wherein a reduction or inhibition of a symptom associated with asthma identifies the test agent as an agent that alleviates or ameliorates a symptom associated with asthma.
54. A method of identifying an agent that alleviates or ameliorates a symptom associated with asthma, comprising:
 - a. providing a test agent that binds to OX40 or OX40 ligand (OX40L);

- b. measuring a symptom associated with asthma in the presence of the test agent, wherein a reduction or inhibition of a symptom associated with asthma identifies the test agent as an agent that alleviates or ameliorates a symptom associated with asthma.
- 55. The method of claims 53 or 54, wherein the symptom comprises swelling, enlargement, mucus production, rash, eosinophil infiltration, leukocyte or lymphocyte infiltration, cytokine or chemokine production, hyperplasia, inflammatory lesions or necrosis.
 - 56. The method of claims 53 or 54, wherein the symptom is associated with allergic asthma.
 - 57. The method of claim 56, wherein the symptom comprises wheezing, shortness of breath, chest tightness, cough, and sputum production, airflow restriction, airway edema or mucus production.
 - 58. The method of claim 56, wherein the symptom comprises eosinophil infiltration of lung, leukocyte infiltration of lung, hyperplasia of mucus secreting epithelium, inflammatory lesion of lung, goblet cell hyperplasia, or increased Th2 cytokine production
 - 59. The method of claim 56, wherein the asthma is mediated at least in part by OX40 signaling.
 - 60. The method of claim 53 or 54, wherein the test agent comprises an antibody or a modified OX40 or OX40L.
 - 61. The method of claim 60, wherein the modified OX40 or OX40L comprises a subsequence, variant sequence, chimeric sequence or dominant negative sequence.
 - 62. The method of claims 53 or 54, wherein the test agent comprises a human or humanized antibody.
 - 63. The method of claims 53 or 54, wherein the test agent comprises an antisense nucleic acid molecule or RNAi that binds to OX40 or OX40L DNA or RNA.
 - 64. The method of claims 53 or 54, wherein the test agent comprises a cytokine.
 - 65. The method of claims 53 or 54, wherein the symptom occurs *in vivo*.
 - 66. The method of claims 53 or 54, wherein the symptom occurs in a mammal.
 - 67. A method of identifying an agent for treating asthma, comprising:

- a. providing a test agent that reduces or inhibits signaling, expression or activity of OX40 or OX40 ligand (OX40L);
 - b. measuring asthma in the presence of the test agent, wherein alleviating or ameliorating asthma identifies the test agent as an agent for treating asthma.
68. A method of identifying an agent for treating asthma, comprising:
- a. providing a test agent that binds to OX40 or OX40 ligand (OX40L);
 - b. measuring asthma in the presence of the test agent, wherein alleviating or ameliorating asthma identifies the test agent as an agent for treating asthma.
69. A method of alleviating or ameliorating a symptom associated with asthma caused at least in part by exposure to an antigen, comprising administering to a subject having asthma an amount of an agent sufficient to reduce or inhibit OX40 or OX40L signaling, expression or activity, thereby alleviating or ameliorating a symptom associated with asthma.
70. A method of inhibiting or reducing a recall response associated with asthma caused at least in part by exposure to an antigen, comprising administering to a subject having asthma an amount of an agent sufficient to reduce or inhibit OX40 or OX40L signaling, expression or activity, thereby inhibiting or reducing a recall response associated with asthma.
71. A method of preventing asthma in a subject having asthma caused at least in part by exposure to an antigen, comprising administering to the subject an amount of an agent sufficient to reduce or inhibit OX40 or OX40L signaling, expression or activity, thereby preventing asthma.
72. A method of preventing a recall response associated with asthma in a subject having asthma caused at least in part by exposure to an antigen, comprising administering to the subject an amount of an agent sufficient to reduce or inhibit OX40 or OX40L signaling, expression or activity, thereby preventing a recall response associated with asthma.
73. A method of decreasing inflammation associated with a memory response, comprising administering to a subject having inflammation associated with a memory response an amount of an agent sufficient to reduce or inhibit OX40 or OX40L signaling, expression or activity, thereby decreasing inflammation associated with a memory response.

- 74. The method of claim 73, wherein the inflammation is prevented or eliminated.
- 75. A method of decreasing a T cell inflammatory memory response, comprising administering to a subject having inflammation associated with a memory response an amount of an agent sufficient to reduce or inhibit OX40 or OX40L signaling, expression or activity, thereby decreasing a T cell inflammatory memory response.
- 76. The method of claim 75, wherein the T cell inflammatory memory response is prevented or eliminated.